

TECHNICAL DATA SHEET (TDS)

SharkDispersionFX2™

| SUBJECT | CONTENT | COMMENT | | | | | | | | | | | | | | |
|--|--|--|-----------|------------------|----------|--|-------------------|--------------|------------------------|-------|------------|--------------|--------|--|--|---------|
| PVB polymer | Recycled plasticized PVB from safety glass applications – SharkFlakesC1™ & SharkFlakesC2™ | Hydroxyl content ~ 12 % Butyral content ~ 64 % Nonvolatile softeners ~ 22 % Calculated molecular weight X 104: 70 - 300.000 meaning average values approx. 200.000 | | | | | | | | | | | | | | |
| Plasticizer type and content | Analysis made of SharkFlakesC1 raw-material for the dispersion. Dissolution in organic solvent and analyzing by gas-chromatography with mass selective detection. | <table border="1"> <thead> <tr> <th>Parameter</th> <th>Results in mg/kg</th> </tr> </thead> <tbody> <tr> <td>Adipates</td> <td></td> </tr> <tr> <td>Di-n-Hexyladipate</td> <td>Not detected</td> </tr> <tr> <td>Di(butoxyethyl)adipate</td> <td>1.800</td> </tr> <tr> <td>Phthalates</td> <td>Not detected</td> </tr> <tr> <td>Others</td> <td></td> </tr> <tr> <td>Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH)</td> <td>230.000</td> </tr> </tbody> </table> | Parameter | Results in mg/kg | Adipates | | Di-n-Hexyladipate | Not detected | Di(butoxyethyl)adipate | 1.800 | Phthalates | Not detected | Others | | Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH) | 230.000 |
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| Adipates | | | | | | | | | | | | | | | | |
| Di-n-Hexyladipate | Not detected | | | | | | | | | | | | | | | |
| Di(butoxyethyl)adipate | 1.800 | | | | | | | | | | | | | | | |
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| Others | | | | | | | | | | | | | | | | |
| Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH) | 230.000 | | | | | | | | | | | | | | | |
| Surfactant | Potassium Oleate | | | | | | | | | | | | | | | |
| pH | 9,0 - 10,0 | | | | | | | | | | | | | | | |
| Brookfield Viscosity, RVT No. 2 spindle, 50 rpm @ 20°C | Viscosity 50-250 mPa·s | PVB dispersion is a colloid and a Non-Newtonian liquid. | | | | | | | | | | | | | | |
| Total Solids % w/w | 46,0 – 49,0 | | | | | | | | | | | | | | | |
| Particle Charge | Anionic | Adding cationic components will make the dispersion unstable. | | | | | | | | | | | | | | |

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| Conductivity | The dispersions are slightly antistatic. | Further antistatic agents can be added upon request. |
| Density | 1,03 kg/ltr. | 1,0 – 1,1 kg/ltr. |
| Product name: SharkDispersionPC100W™ | Input material source: Post-consumer | Particle size d(0,5) (Microtrac DLS equipment), dry film appearance: < 0,300 µm, clear hazy |
| Delivery form | Milky white to greyish Dispersion | Filtered 200 Microns |
| Minimum Film Formation Temperature (MFFT) | 0 °C | Tg (plasticized PVB): - 10 °C (Tg (non-plasticized PVB): 62 - 78 °C) |
| Biocides | Acticide MBS™ Mergal 753 F™ | To make the dispersion antibacterial and ensure increased shelf life. BIT <375 ppm ; MIT < 15 ppm |
| Application areas | Water Borne Coatings | Peelable coatings, paper coatings, textiles etc. Performance enhancing co-binder with improved formulation latitude and resistance to water after drying. Stirring before use is mandatory. |
| UV resistance | | Very little UV absorption, but inert to UV light. The binder will not be degraded by UV radiation. |
| Storage stability | To be kept from freezing conditions | Passes minimum one freeze-thaw cycle @ -20 °C in 72 hours. Shelf life in unopened containers is minimum one year. Stirring before use is mandatory. |

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